REMARKS

The Applicant hereby affirms the election, without traverse, to prosecute the invention of group II, namely the invention covered by claims 12-33. Applicant confirms that claims 1-11 and 34 are withdrawn from further consideration by the Examiner.

The Examiner objected to claims 19-20 and 23 as being dependent upon a rejected base claim, but stated that they would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. In response, Applicant has amended the claims accordingly, so that claims 19 and 23 are now independent claims and claim 20 is dependent on claim 19. Minor amendments have also been made to the wording of the three claims to clarify the structure of some of the components and to provide antecedents for others.

The Examiner rejected claims 12, 21-22, 26 and 33 under 35 U.S.C. 102(b) as being anticipated by Norito et al (JP 02-092727). Specifically, the Examiner stated that Norito et al. in figures 1-4 discloses a vibration-isolating device for a vehicle exhaust system comprising an insulator (5) having an outer surface, a front surface and a rear surface. Furthermore, the Examiner stated that Norito et al. discloses a heat shield (1) having a cup-shaped body defining a chamber; the insulator substantially disposed within the chamber and the heat shield adapted to insulate the insulator from an external heat source.

In response, Applicant respectfully disagrees with the Examiner's position that

the bracket 1 of Norito et al. is a heat shield. Applicant submits that bracket 1 is rather merely a mechanism for connecting the vibration insulator to the vehicle body. As may be seen in Figs. 1 and 5 of Norito et al., the bracket 1 is not positioned in a manner that would enable it to shield most or all of the rubber body 5 from the exhaust pipe 7 - the place where the heat is radiating from. If Norito et al. had designed the bracket 1 to shield body 5 from the heat in exhaust 7, they would surely have provided a wall above the surface A (indicated in a Applicant-marked version of Fig. 1). It can be seen from the marked-up Fig.1, that surface A of body 5 (i.e., the surface closest to the exhaust pipe 7) is exposed to the atmosphere - there is no type of cover or shield over it. Only a portion of the body 5, marked as portion B, is covered by a small segment of one of the sidewalls C of bracket 1. Even that small segment of sidewall C does not extend sufficiently upwardly toward fins 13 to provide effective shielding of body 5. Applicant respectfully submits that bracket 1 of Norito et al. does not insulate the rubber body 5 from the heat in the exhaust pipes - it merely holds the rubber body 5 in a position suitable to perform its vibration dampening function. Furthermore, as may be seen in Figs. 2-4, when an alternative mechanism is used to connect the body 5 to the vehicle body 2, the bracket 1 is completely omitted which reinforces the position that the bracket is simply a connector mechanism.

In Applicant's device, the heat shield 42 covers both the front surface 70 and outer surface/outer peripheral wall 50 of the vibration insulator 36. Inner surface 52 of the heat shield 36 lies in contact with at least a portion of both the outer surface 50 and the front surface 70 of the vibration insulator 36. This can most clearly be seen in Fig. 7

of the instant specification. The heat shield is made of a heat resistant material and it lies in contact with the outer surface 50 and front surface, effectively shielding most of the insulator from the heat from the exhaust pipe. The device disclosed by Norito et al., on the other hand, shows in Fig.1 (marked-up version) that the inner lining G of bracket 1 lies in contact with the outer surface H of the rubber body 5, but it does not lie in contact with the surface J of the rubber body 5 that is contained within the bracket 1. A large air space K exists between surface J and the inner lining G. If bracket 1 was a heat shield, the air space K is positioned on the wrong side of the body 5 to provide any type of thermal protection for the body 5 from the heat in exhaust 7. For an air pocket to provide thermal protection, it should be positioned between the heat source and the body to be protected. This is not found in Norito et al. If the bracket 1 of Norito et al. is made of metal, the contact between the wall C of bracket 1 and rubber body 5, would in fact conduct heat from exhaust 7 to body 5 instead of providing thermal protection to the same. Applicant's device on the other hand uses a combination of the material that the heat shield is manufactured from and a plurality of air pockets positioned between the heat shield and vibration insulator to thermally protect the vibration insulator. Applicant's flexible heat shield molds to the shape of the vibration insulator and in so doing provides an extra layer of heat resistant material around the front surface and side walls of the vibration insulator. The flexibility of the heat shield ensures that thermal protection is provided to the vibration insulator at exactly all the points that it is needed.

With reference to Claim 22, the Examiner stated that Norito et al. discloses the

insulator including protuberances and valleys between the protuberances; and that the body of the heat shield included sidewalls and the air spaces are formed between the valleys and the sidewalls (Figs. 4-5). Applicant respectfully disagrees with the Examiner on this point. Referring to a marked-up version of Fig. 4 of Norito et al., it can be seen that the rubber body 5 has an outer wall or perimeter indicated at P. The outer wall P is free of any valleys or protuberances. Furthermore, rubber body 5 as referenced in Fig. 4 does not interact a bracket at all and consequently it is impossible to form air spaces between body 5 and the non-existent sidewalls of the bracket. Referring to the marked-up version of Fig. 1 (which is essentially the equivalent of Fig. 5, except for the existence of the fins 13), there is no indication that there are any protuberances or valleys around the outer perimeter wall P. The outer perimeter wall P lies in direct and continuous contact with the sidewalls C. There are no protuberances or valleys between outer perimeter wall P and sidewalls C and there are also no air spaces formed between outer perimeter wall P and sidewalls C. The only possible protuberances and valleys on the Norito et al. device are those formed on surface J and an air space K is formed between those protuberances and valleys and bottom wall G of bracket 1. Surface J is the equivalent of the rear surface of Applicant's device seeing as it is disposed a spaced distance from the exhaust.

On the other hand, the outer perimeter surface of the instant device is shown in Figs. 2 & 5 of Applicant's specification by the numeral 50. Outer perimeter surface 50 includes four round protuberances 60, 60', 62, 62' and adjacent valleys 63. Fig. 5 shows that air spaces or gaps are formed between valleys 63 and heat shield 42.

Applicant respectfully submits that the location of the air spaces in the Norito et al. reference and the instant specification differ significantly. Applicant further submits that the air space K in Norito et al. serves no thermal protective function - it is merely a gap between a mounting bracket and the component it is mounting.

Applicant has amended independent claims 12 and 26 by including the limitation that at least a portion of the front surface and the outer surface of the vibration insulator contact the inner surface of the heat shield. Anticipation under 35 U.S.C. 102(b) requires that the reference disclose, either expressly or inherently, every limitation of the claim....."[A]bsence from the reference of any claimed element negates anticipation *In re Row v. Dror,* 42 USPQ 2d 1150, 1553 (Fed. Cir. 1997) (quoting *Kloster Speedsteel AB v. Crucible, Inc.,* 230 USPQ 81, 84 (Fed. Cir. 1986)). Applicant respectfully submits that Norito et al. does not disclose that the outer surface and front surface of the vibration insulator contact the inner surface of the heat shield. As Norito is missing this limitation, Applicant respectfully submits that the reference does not anticipate independent claims 12 and 26. Applicant therefore respectfully requests withdrawal of the rejection of claims 12, 21-22, 26 and 33 under 35 U.S.C. 102(b) as being anticipated by Norito et al.

The Examiner rejected claims 13-18, 24-25 and 27-32 under 35 U.S.C. 103(a) as being unpatentable over Norito et al. Specifically, the Examiner stated that regarding claims 13-16 and 27-30, Norito et al. discloses a heat shield (1) which is made from a rigid material, but the reference fails to show the heat shield made from a flexible, heat-resistant material, an elastomer, a silicone elastomer from a group ASTM

D200 classification GE, FC, FE and FK. The Examiner stated that it would be a matter related to the choice of ornamentation producing no mechanical effect and take advantage of that select material such as heat resistance, long lastingness and flexibility or advantage considered to constitute the invention are considered obvious and do not impart patentability. *In re Seid,* 73 USPQ 431. The Examiner raised a similar rejection with respect to claims 17-18 and 31-32, stating that Norito et al. discloses an insulator (5) which is made from rubber, but fails to show the insulator made from fluorolastomer and ethylene acrylic.

In response, Applicant submits that because claims 13-16; 17-18; 24-25 and 27-30; 31-32 are dependent from amended claims 12 and 26 respectively, which claims Applicant submits are patentable over the prior art as argued above, Applicant respectfully submits that these claims are now allowable. Applicant would however like to reiterate their position that bracket 1 of Norito et al. is not a heat shield, but is instead a rigid connector that is used to secure the rubber body 5 to the vehicle body 2. The bracket 1 takes up a larger space under the chassis of the vehicle than would the rubber body 5 alone. This is a problem because of the number of components that need to be mounted under the vehicle body and the ground clearance of vehicle underbody. In Applicant's device, on the other hand, the heat shield is slipped over the vibration insulator and essentially occupies the same space as the vibration insulator. The heat shield effectively provides an extra layer of heat resistance over the regions of the vibration insulator closest to the heat source, i.e. the exhaust system, but does not occupy any additional space under the vehicle chassis. Furthermore, the

installation and removal of Applicant's device is simplified. The mechanic needs no tools to install or remove the heat shield from the vibration insulator - it may be slipped on and off the insulator by hand. Additionally, because the apertures for receiving the connectors to both the exhaust and vehicle bodies are aligned in both components, there is no need for the mechanic to expend any more effort in installing the heat shield than if he were simply installing a vibration insulator without a heat shield. Furthermore, because the heat shield is flexible it is able to move with the vibration insulator as it moves in response to the vibrations in the exhaust system. This means that the heat shield stays in the correct positional relationship to the vibration insulator during operation and the shield consequently maintains its optimal thermal protection of the vibration insulator during operation.

The Examiner stated that it would be obvious to use a flexible material for the heat shield. Applicant respectfully disagrees. If the known prior art is considered, it will be seen that none of the references disclose the use of a flexible material for a heat shield. U.S. Patent No. 3,863,445 granted to Heath, discloses in column 2, lines 18-21, that .... the shield arrangement ... comprises curved metal plates... U.S. Patent No. 4,349,078 to Shimada et al. discloses the use of heat shields that are rigidly attached to the heat producing element (column 3, line 32) and from the angular flanges on the shields, it can be presumed that the shields 5 & 6 are made of a rigid material. These patents suggest that it would be obvious for one skilled in the art to use a rigid material as a heat shield and not a flexible material. There is no suggestion in the prior art that flexibility is even desirable. Applicant respectfully submits that the flexibility of the heat

shield as proposed by the Applicant provides the advantages of ease of installation and removal of the shield, the lack of the need for tools for installing or removing the shield and the positioning of the shield in close proximity to those areas of the vibration insulator that are closest to the heat source. Applicant therefore respectfully submits that the flexible, heat resistant shield as disclosed in the instant specification does provide mechanical advantages over the heat shields proposed in the prior art. Applicant hereby requests the withdrawal of the rejection of claims of claims 13-18, 24-25 and 27-32 under 35 U.S.C. 103(a) as being unpatentable over Norito et al.

Applicant has added new claims 34 to 46. The majority of these claims include the limitation that both the heat shield and vibration insulator each have an aperture and that the apertures in the two components align with each other. This feature is not found in the prior art. Support for these claims are found in the drawings of the instant specification. Applicant respectfully requests consideration of these new claims and re-consideration of claims 12-33.

If the Examiner believes a conversation with the undersigned attorney could be of assistance in resolving any outstanding matters, they should not hesitate to contact the undersigned attorney at (330) 244-1174.

Respectfully submitted at Canton, Ohio this 14th day of July, 2003.

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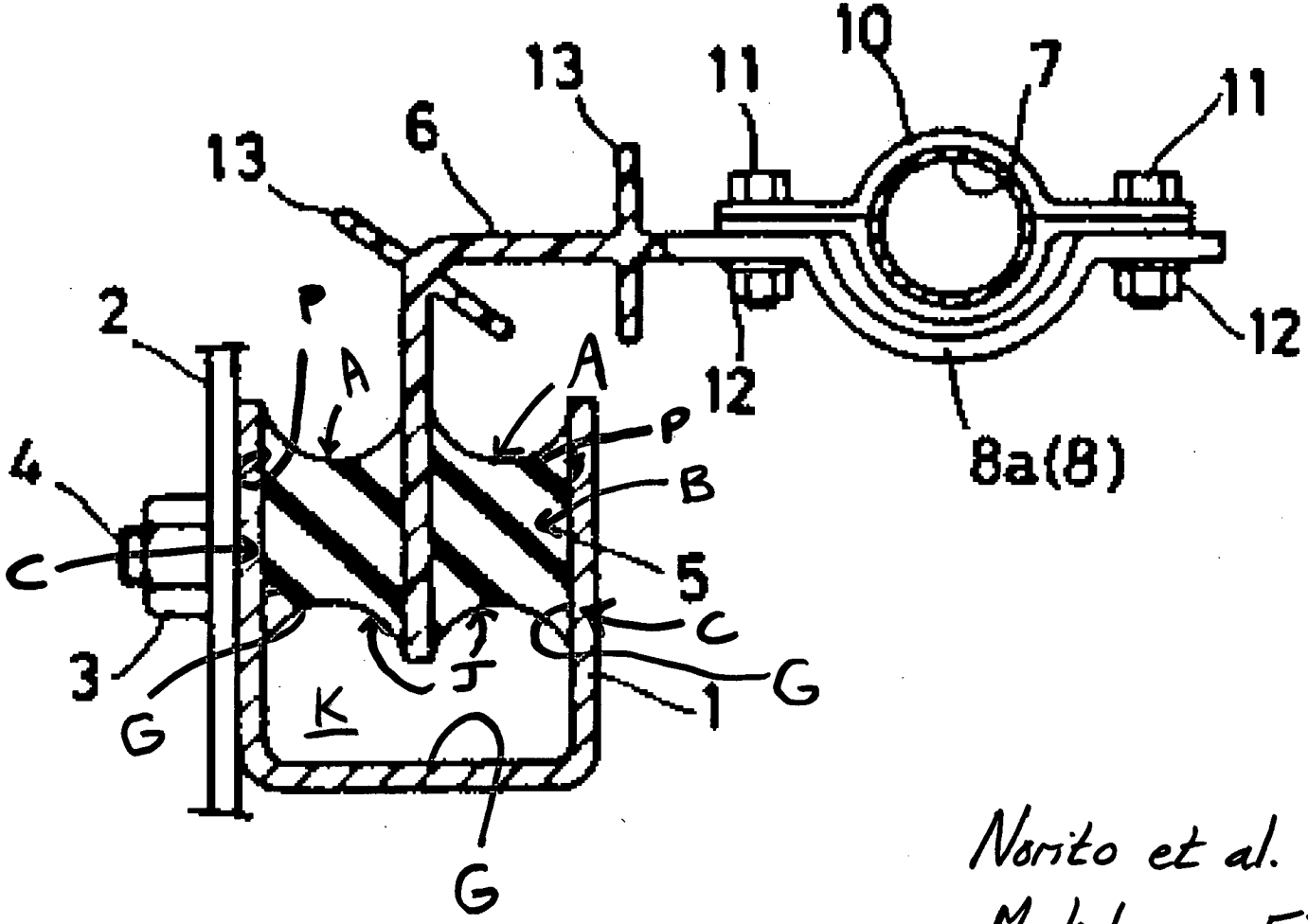
Enclosures - Marked-up Fig. 1 of Norito et al
Marked-up Fig. 4 of Norito et al

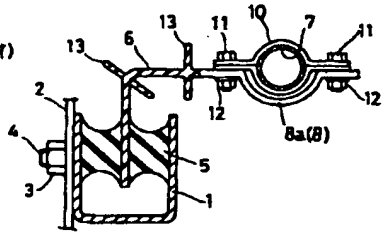
Docket No. 1826-AY



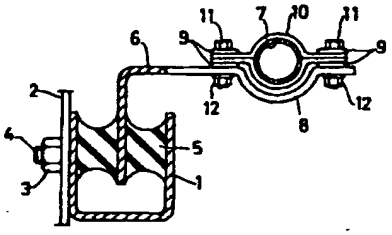
Norito et al.
Marked-up Fig 1.

2……本体(支持部材)
5……ゴム体(緩衝体)
6……ブラケット
7……エキゾーストパイプ(振動部材)
8……保持部材

第 1 図



第 5 図



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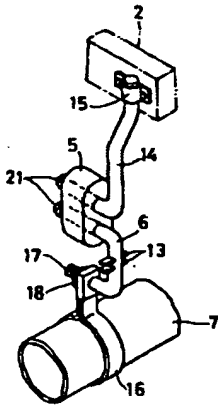

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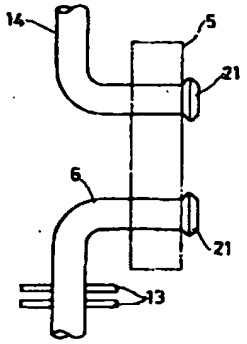
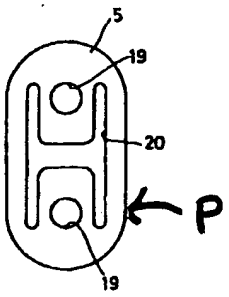


第 4 図



Norito et al.
Marked-up Fig 4.